at a second unit, sensing the first magnetic field on at least two transducer elements; and

based on the sensed first magnetic field, selectively transmitting on one or more transducer elements at the second unit to compensate for position and orientation of the first unit.

100. A method as in claim 99, wherein the step of sensing the first magnetic field includes:

detecting an amplitude of the first magnetic field on the at least two transducer elements of the second unit.

101. A method as in claim 100 further comprising:

based upon a magnitude of the sensed first magnetic field at each of the at least two transducer elements, selectively transmitting on each of the at least two transducer elements of the second unit to orient the second magnetic field for reception at the first unit.

102. A method as in claim 101 further comprising:

generating a signal for driving the at least two transducer elements of the second unit; and

individually adjusting a phase of the signal for driving each of the at least two transducers of the second unit to compensate for position and orientation of the first unit.

103. A method as in claim 99, wherein at least one of the multiple transducers elements at the second unit functions as both a transmitter and receiver of a magnetic field.

104. A method as in claim 99 further comprising:

positioning each of the multiple transducers in the second unit to be uniquely oriented with respect to each other.

105. A method as in claim 103 further comprising:

selecting a single transducer of the second unit to generate the second magnetic field depending on which of the multiple transducers in the first unit receives a strongest signal from the second unit.

106. A method as in claim 99, wherein the second unit includes three transducer elements that are positioned substantially orthogonal to each other and the first unit includes only a single transducer element.

107. A method as in claim 99, wherein a relative orientation of transducer elements in the first and second units changes over time.

108. A method as in claim 99, wherein the second unit is coupled to a communications network and the wireless link between the first unit and second unit is part of a logical connection between the first unit and the communications network.

109. A method as in claim 99, wherein an orientation of the second magnetic field is approximately aligned with the first magnetic field.

110. A method as in claim 99 further comprising:

adjusting at least one phase of a signal transmitted over the at least two transducers by 180 degrees to orient the second magnetic field for better reception at the first unit.

111. A method as in claim 99, wherein the step of selectively transmitting includes:

at the second unit, generating the second magnetic field along an axis of one of the at least two transducers of the second unit.

112. A method as in claim 99, wherein the step of selectively transmitting includes:

at the second unit, generating the second magnetic field along an axis other than that of the at least two transducers.